



Hardness Testers - Measuring Quality

## MICROPIXEL - D5



## TECHNICAL DATA

### TEST LOADS:

#### Vickers:

HV0,01 - HV0,015 - HV0,02 - HV0,025 - HV 0,1 - HV 0,2 - HV 0,3 - HV 0,5 - HV 1 - HV 2 - HV 3 - HV 5 - HV 10 - HV 20 - HV 30 - HV50

#### Knoop:

HK0,01 - HK0,02 - HK0,025 - HK0,05 - HK 0,1 - HK 0,2 - HK 0,3 - HK 0,5 - HK 1

#### Brinell:

HBW 1/1 - HBW 1/2.5 - HBW 1/5 - HBW 1/10 - HBW 1/30 - HBW 2.5/31.25

### HARDNESS TESTS AVAILABLE:

#### Vickers:

0,098 - 0,147 - 0,196 - 0,245 - 0,980 - 1,961 - 2,942 - 4,903 - 9,807 - 19,61 - 29,42 - 49,03 - 98,07 - 196,1 - 294,2 - 490,3 N (0,01 - 0,015 - 0,02 - 0,025 - 0,1 - 0,2 - 0,3 - 0,5 - 1 - 2 - 3 - 5 - 10 - 20 - 30 - 50 Kgf)

#### Knoop:

0,098 - 0,196 - 0,254 - 0,490 - 0,980 - 1,961 - 2,942 - 4,903 - 9,81 N (0,01 - 0,02 - 0,025 - 0,05 - 0,1 - 0,2 - 0,3 - 0,5 - 1 Kgf)

#### Brinell:

9,81 - 24,52 - 49,03 - 98,07 - 294,2 - 306,5 N (1 - 2,5 - 5 - 10 - 30 - 31,25 Kgf)

### SCOPE OF APPLICATION:

To perform single and multiple micro and macro Vickers, Knoop and Brinell hardness tests on ferrous and non-ferrous metals such as: iron, steel, tempered steel, cast iron, brass, aluminium, copper and metal alloys. Heat treatments, hardened and nitrided materials. Tests on ceramics and glass.

### REFERENCE STANDARDS:

ISO 6506, ISO 6507, ISO 4545, ASTM E10, ASTM E92, ASTM E384

### POWER SUPPLY:

115/230VAC - 50÷60Hz

### TEST CYCLE:

Manual focus, automatic hardness measurement (possibility of manual measurements available)

### OPTICAL SYSTEMS:

- 5-position motorized turret with:
  - Optical lenses: No. 4 included - 2.5X, 5X, 10X and 50X as default setting
  - Indenters: No. 1 included - Vickers
- Energy-saving LED lighting to guarantee a natural-coloured vision
- High-definition 5 MP camera with 3.0 USB connection

### IT SYSTEM:

Microsoft Windows 10®  
Keyboard, mouse and 24" full HD monitor included

### SOFTWARE:

- Vx®
- Micrometrical XY table with digital indicators;
- Users management: different access levels to software setup;
- Sample profiles detection feature;
- Data output: USB, Ethernet
- Data export and backup as .pdf, .xls, .xml, .txt, and .csv files

### OPTIONAL ACCESSORIES AND CUSTOMIZATIONS

- Further optical lenses to be installed: 2,5X e 20X (default setting replacement)
- Further indenters to be installed: Knoop; Ø1mm ball and Ø2.5mm ball (default setting replacement)
- Customizable test loads: up to 1gf; 5gf or 62,5kgf

### DIMENSIONS

- Vertical capacity: 110 mm using XY table  
180 mm without XY table
- Depth capacity: 162mm
- Z axis stroke: 40 mm
- Weight: 70Kg

